

Appl. No. : 09/930,591
Filed : August 15, 2001

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph beginning at page 1, line 5, with the following rewritten paragraph:

This application claims priority to U.S. Provisional Patent Application Nos. 60/225,767 and 60/229,175, filed August 17, 2000 and August 29, 2000, respectively, and ~~U.S. Patent Application No. 09/705,547, filed November 3, 2000~~, all of which are hereby expressly incorporated by reference in their entireties.

Please replace the paragraph beginning at page 63, line 23, with the following rewritten paragraph:

Many more ribavirin derivatives can be generated using conventional techniques in rational drug design and combinatorial chemistry. For example, Molecular Simulations Inc. (MSI), as well as many other suppliers, provide software that allows one of skill to build a combinatorial library of organic molecules. The C2.Analog Builder program, for example, can be integrated with MSI's suite of Cerius2 molecular diversity software to develop a library of ribavirin derivatives that can be used with the embodiments described herein. ~~(See e.g., <http://msi.com/life/products/cerius2/index.html>, herein expressly incorporated by reference in its entirety).~~

Please replace the paragraph beginning at page 50, line 19, with the following rewritten paragraph:

Since many adjuvants, including ribavirin, ~~has~~ have been on the market for several years, many dosage forms and routes of administration are known. All known dosage forms and routes of administration can be provided within the context of the embodiments described herein. Preferably, an amount of adjuvant (e.g., ribavirin) that is effective to enhance an immune response to an antigen in an animal can be considered to be an amount that is sufficient to achieve a blood serum level of antigen approximately

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0.25 - 12.5 μ g/ml in the animal, preferably, about 2.5 μ g/ml. In some embodiments, the amount of adjuvant (e.g., ribavirin) is determined according to the body weight of the animal to be given the vaccine. Accordingly, the amount of adjuvant (e.g., ribavirin) in a vaccine formulation can be from about 0.1 - 6.0mg/kg body weight. That is, some embodiments have an amount of adjuvant (e.g., ribavirin) that corresponds to approximately 0.1 - 1.0mg/kg, 1.1 - 2.0mg/kg, 2.1 - 3.0mg/kg, 3.1 - 4.0mg/kg, 4.1 - 5.0mg/kg, 5.1, and 6.0mg/kg body weight of an animal. More conventionally, the vaccines contain approximately 0.25mg - 2000mg of adjuvant (e.g., ribavirin). That is, some embodiments have approximately 250 μ g, 500 μ g, 1mg, 25mg, 50mg, 100mg, 150mg, 200mg, 250mg, 300mg, 350mg, 400mg, 450mg, 500mg, 550mg, 600mg, 650mg, 700mg, 750mg, 800mg, 850mg, 900mg, 1g, 1.1g, 1.2g, 1.3g, 1.4g, 1.5g, 1.6g, 1.7g, 1.8g, 1.9g, and 2g of adjuvant (e.g., ribavirin). Some embodiments also include other adjuvants, binders, emulsifiers, carriers, and fillers, as known in the art, including, but not limited to, alum, oil, and other compounds that enhance an immune response.